# Passenger Rail Performance: Sustaining Reliable Service

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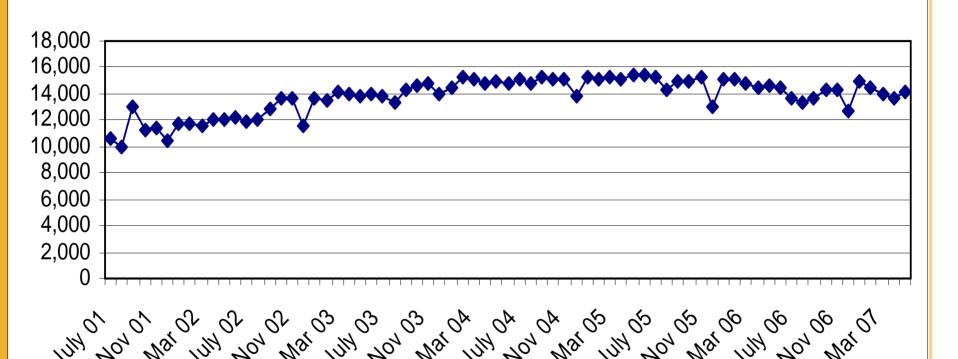


#### Sustaining Reliable Service

- □ First priority is effective and efficient operation of current service
- Capacity
  - Maintaining Existing Capacity
  - Building Additional Capacity
  - Operations
- Weather Conditions
  - Heat Restrictions
- Mechanical
  - Equipment Renewal or Replacement



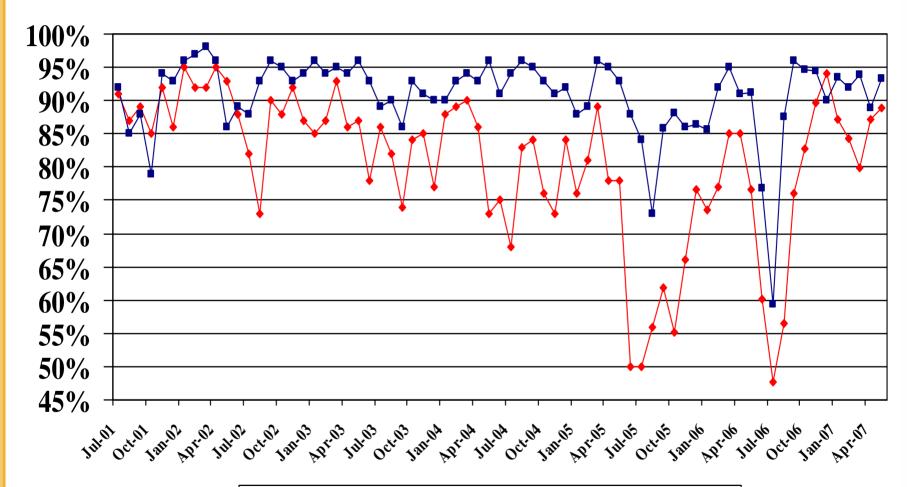
#### VRE Ridership July 2001 – May 2007



—**←** Ridership



#### VRE On-Time Performance July 2001 – May 2007



**→** Fredericksburg Line **→** Manassas Line

#### Addressing the Causes of Delay

- CSX's Role
- Virginia's Role
- VRE's Role
- Amtrak's Role



# CSX's Role: Maintaining Existing Capacity

- Recently completed a 3-year tie and surfacing program for the RF&P Subdivision Cost \$30M
- Continues to work to dispatch trains without conflicts while on system
- Continues to work cooperatively with DRPT on capacity modeling effort and in constructing MOU projects
- Needs to focus on sustained reliability of both passenger and freight operations



# Virginia's Role: Building Additional Capacity

- □ Provided \$65M + \$20M for capacity improvements:
  - 6 MOU projects
  - Richmond Area Improvements
- □ Provided \$7.5M for Quantico Creek Bridge (\$26M project)
- Provided \$15M for VRE locomotives
- Working to understand on-time performance issues and causes of delay
- Needs to develop a statewide passenger rail strategy to support safe, efficient and reliable service



# Virginia's Role: Capacity Modeling

- Acca Yard Study
  - Model train movements and capacity from Baltimore, MD to Florence, SC.
    - Includes Virginia capacity improvements underway
    - Evaluates conflicts due to current and future train operations
    - Will evaluate changes in routing between Staples Mill Station and South Petersburg, and eastward to include Main Street Station/Fulton Yard. Also includes the evaluation of the Buckingham Branch Railroad as a passenger routing option from Main Street Station to Doswell
    - North Carolina is also conducting a follow on to this study to evaluate improvements in NC from Rocky Mount to South Collier/Petersburg
- □ Project Completion Winter 2007 Cost ~\$500,000



#### Virginia's Role: Understanding Effects of Weather Delays (1)

- 2007 Session of the General Assembly required DRPT and CSX to enter into an agreement that will provide for improved and reliable passenger and freight operations in the I-95 Rail Corridor prior to the release of any Rail Enhancement Funds for the I-95 Rail Corridor.
- □ This agreement must include provisions for managing heat restrictions, including strategies for maintaining or enhancing the reliability of passenger rail service during heat restrictions.



#### Virginia's Role: Understanding Effects of Weather Delays (2)

- DRPT and CSX are negotiating the Improved and Reliable Passenger and Freight Rail Operations Agreement for the I-95 Rail Corridor.
- This agreement will answer the following questions:
  - What are the causes of and need for heat restrictions?
  - What can be done to eliminate and/or better manage heat restrictions?
  - What is the overall framework/agreement of how to improve the reliability of passenger and freight rail operations for the corridor?
- Anticipated completion Summer 2007



# VRE's Role: Status of Mechanical Improvements

- Aging equipment and related failures degrade on-time performance year round
- □ VRE has implemented changes to its current maintenance practices to improve existing efficiency of mechanical operations
  - Maintenance operations have been established at Crossroads Yard to provide additional time for the maintenance of locomotives and cars



#### Virginia's/VRE's Role: Improving VRE Mechanical Reliability

- ☐ Cab Car 100 % Replacement Complete
  - 11 cab cars were replaced
  - Total cost \$26.12M
- ☐ Bi-Level Coaches on order 100% Replacement of all VRE cars
  - 50 coaches on order to be delivered at a rate of 5 coaches per month over a 10 month period beginning July 2007
  - Total cost \$92.5M, \$20M from DRPT
- Locomotives 20 locomotives needed for 100% replacement at a total cost of \$78.86M, \$15M funded from DRPT



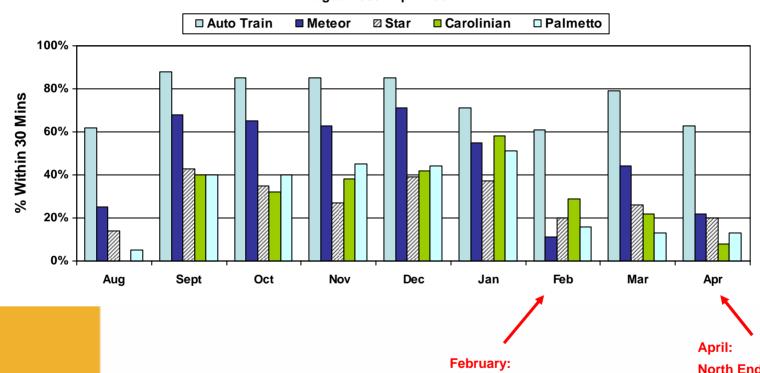
# Amtrak Southeast Corridor Performance Plan



#### Amtrak On-Time Performance Southeast Corridor August 2006 – April 2007

#### **Endpoint On-Time Performance**

August 2006 - April 2007





April: North End, Charleston, and Hamlet Subs



Note: Piedmont not shown because it does not operate on CSX and was not affected by CSX's spring trackwork.

#### Amtrak and CSX Work to Improve Service Reliability

- July 2006, CSX and Amtrak meet to begin work to improve on-time performance
- During August 2006 April 2007:
  - All Amtrak routes' OTP improved vs same period prior year
  - Amtrak routes at or near 75% OTP
    - AutoTrain = 77% (calculated as if hour-longer schedule had been in place for entire period)
    - Piedmont = 73%
  - Routes showing significant improvement vs same period prior year
    - Silver Meteor = 48% (up from 21%)
  - Routes requiring significant work
    - Silver Star = 29%
    - Palmetto = 29%
    - Carolinian = 32%

#### **Endpoint Arrivals by Lateness Threshold**

Auto Train	<u>30 Min</u>	90 Min	<u>3 Hr</u>
Actual: August '05 - April '06	18%	49%	79%
Actual: August '06 - April '07*	77%	89%	97%
Goal	75%	85%	95%

<u>Piedmont</u>	<u>10 Min</u>	30 Min	60 Min
Actual: August '05 - April '06	59%	84%	95%
Actual: August '06 - April '07	73%	91%	96%
Goal	75%	90%	95%

Silver Meteor	<u>30 Min</u>	90 Min	<u>3 Hr</u>
Actual: August '05 - April '06	21%	46%	74%
Actual: August '06 - April '07	48%	73%	89%
Goal	75%	85%	95%

Silver Star	<u>30 Min</u>	90 Min	<u> 3 Hr</u>
Actual: August '05 - April '06	12%	34%	63%
Actual: August '06 - April '07	29%	55%	82%
Goal	75%	85%	95%

<u>Palmetto</u>	<u>30 Min</u>	90 Min	<u>3 Hr</u>
Actual: August '05 - April '06	25%	59%	87%
Actual: August '06 - April '07	29%	62%	89%
Goal	75%	85%	95%

<u>Carolinian</u>	30 Min	<u>90 Min</u>	<u> 3 Hr</u>
Actual: August '05 - April '06	20%	65%	90%
Actual: August '06 - April '07	32%	68%	95%
Goal	75%	85%	95%

<sup>\*</sup>Auto Train performance assumes hour longer schedule for August '06-April '07.

#### Amtrak Train Delays Southeast Corridor

#### Delay Minutes by Route and Responsibility Aug 2006 – Apr 2007

	Host-Responsible Delay Minutes as % of Delay Minutes While on CSXT* and NS						nd NS
	Dispatching-Related Infrastructure-Related						
	Frt Train	Psgr Train	Routing/	Slow	Signal	Other Host	
Service	Interference	Interference	Crossovers	Orders	Delays	Resp	Total
Auto Train	28%	11%	7%	28%	11%	3%	88%
Silver Meteor	27%	13%	4%	26%	10%	4%	83%
Silver Star	20%	13%	4%	23%	16%	4%	80%
Palmetto	29%	13%	8%	19%	12%	5%	87%
Carolinian	21%	13%	8%	14%	17%	5%	78%
Piedmont	30%	13%	1%	8%	15%	1%	69%
SE Corr Avg	25%	12%	6%	22%	13%	4%	82%

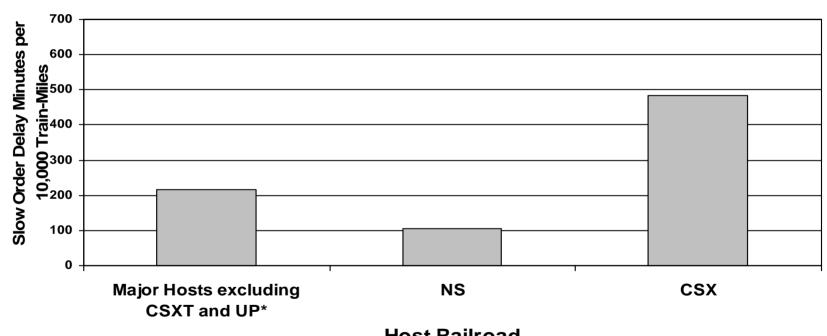
<sup>\*</sup>Includes FDOT, which is maintained and dispatched by CSXT



#### **Amtrak Comparison of Delays**

#### Slow Orders on Southeast Corridor vs. National Average

Most recent 12 months: May 2006 - April 2007





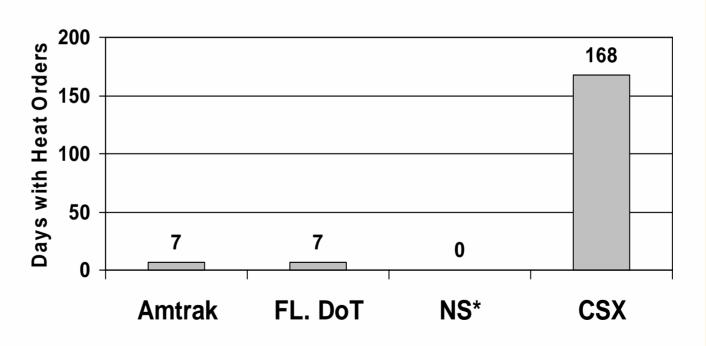


\*"Other Major Amtrak Hosts" include BNSF, CN, CPR, and NS; excludes UP, which signed an agreement with Amtrak in April, 2007 to reduce slow orders by up to 80% on selected major routes; also excludes Amtrak Northeast Corridor.

# Heat Restrictions: Amtrak System Comparison

#### Heat Order Days/Year on Amtrak Routes by Host

Most Recent 12 Months: May 2006 - April 2007





\*Does not include NS-owned track between Raleigh and Cary, which is dispatched by CSX and therefore subject to CSX heat order restrictions

#### Amtrak's Role: Southeast Corridor Performance Improvements (1)

□ As part of the Grant Agreement to fund Amtrak (Section 144), the Federal Railroad Administration requires that Amtrak provide a plan for operational and other changes to improve on-time performance in the Southeast Corridor from Washington, D.C. to Miami, Florida



#### Amtrak's Role Southeast Corridor Performance Improvements (2)

- □ As part of this plan, a goal is established to achieve 75% on-time performance for the Auto Train, Silver Service/Palmetto and Carolinian/Piedmont Trains
- ☐ The plan involves both CSX and NS
- □ Plan development included the formation of a cross discipline Amtrak team to establish the framework of the plan



#### Amtrak's Role Southeast Corridor Performance Improvements (3)

- ☐ Team objectives included:
  - Improving the reliability of train movements on CSX and NS
  - Adjusting Amtrak schedules
  - Adding capacity to CSX and NS
- Team activities included:
  - Surveying corridors and operations
  - Developing near term actions
    - Train slotting
    - Scheduling
    - Heat order practices
- DRPT reviewed a summary of the plan and submitted a letter of support to accompany Amtrak's submission to FRA
- This plan was due on July 1, 2007



#### Conclusion

- □ DRPT has included in the Acca Yard study the modeling of improvements necessary to establish 75% or greater on time performance in the corridor
- □ Capacity modeling will assist in identifying the necessary improvements to sustain a quality level of existing service and identify necessary improvements to allow for the addition of passenger trains
- □ DRPT will continue to work with VRE and Amtrak to further identify issues and improve service





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